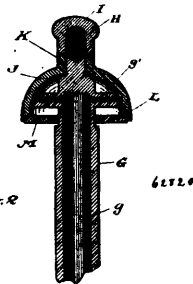
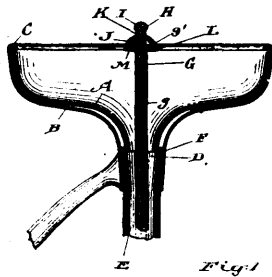


jet or jets having diminutive outlets, a revolvable cap mounted on the top of the water-standard covering the water-jets, and an



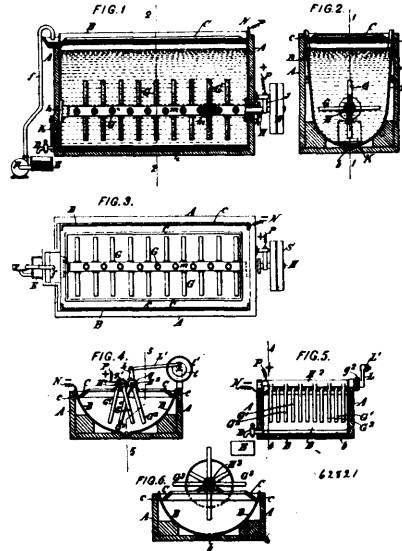
annular flange for the cover encircling the water-standard below the water-jets, to atomize and centrifugally distribute the water to the bowl, substantially as specified. 3rd. A dental cuspidor, consisting of an inner bowl, an outer bowl enclosing the inner bowl provided with an annular intumed flange overlapping the top of the inner bowl, and a flushing device, consisting of a water-jacket centrally located within the inner bowl, having an inlet port or ports, and a revolvable cap for the water-standard covering the ports, and fitted with an annular perforated flange encircling the standard below the ports to atomize and centrifugally distribute the water to the bowl, substantially as specified. 4th. A dental cuspidor, consisting of an inner bowl, an outer bowl enclosing the inner bowl, provided with an annular intumed flange overlapping the top of the inner bowl, and a flushing device, consisting of a water-jacket centrally located within the inner bowl, fitted at its upper end with a water jet or jets, a revolvable cap mounted on the top of the water-standard covering the water-jets, and an annular flange for the cap surrounding the water-standard below the water-jets, to atomize and centrifugally distribute the water to the bowl, substantially as specified. 5th. A flushing device for a dental cuspidor, consisting of a water-standard having an outlet port or ports, and a cap fitted to the water-stand to cover the ports, having an annular perforated flange encircling the standard below the ports to atomize and distribute the water to the bowl, substantially as specified.

**No. 62,821. Process of and Apparatus for Extracting Precious Metals.** (*Procédé et appareil pour extraire les métaux précieux.*)

Hugh Riecken, London, England, 8th March, 1899; 6 years. (Filed 6th June, 1898.)

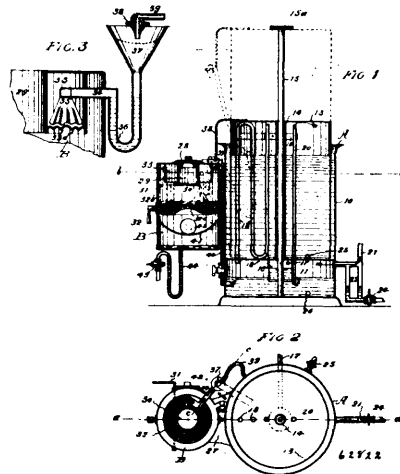
*Claim.*—1st. In an electrolytical process of treating ores and slimes for the extraction of precious metals, particularly gold, therefrom, the employment of a vertical or inclined metallic cathode down which a stream of mercury is caused to flow, substantially as and for the purposes specified. 2nd. A process of extracting precious metals from ores or slimes, which consists in agitating a mixture of the ores or slimes and an electrolyte in the presence of an anode, and of a cathode consisting of an amalgamating plate over which a stream of mercury is caused to flow, and passing a current of electricity through the mixture, all substantially as described. 3rd. In a process of extracting precious metals from ores or slimes by deposition of the same in an adherent form upon a vertical or inclined cathode, the use of a stream of mercury delivered over such cathode, substantially as and for the purposes hereinbefore described. 4th. In the said process collecting the descending mercury and re-conveying it to the top of the metallic cathode so as to provide a continuously renewed, large, clean surface to act upon the precious metal, substantially as specified. 5th. An electrolytic apparatus for extracting precious metals from ores and slimes by the process hereinbefore described and claimed, which apparatus comprises an open tank or vessel, adapted to receive the ore to be treated, having an inner metallic surface forming the cathode, a trough near the upper edge of the vessel, capable of discharging mercury in thin streams down the sides of the vessel, and an anode within the vessel, substantially as described. 6th. An electrolytic apparatus for extracting precious metals from ores or slimes which consists of a vessel having an inner

inclined metallic surface and a converging bottom, a movable anode, a perforated or open pocket near the upper end of the vessel, mer-



cury within such pocket adapted to descend over the metallic surface, and means for re-conveying the mercury from the bottom of the vessel into the pocket, substantially as specified.

**No. 62,822. Gas Generator.** (*Générateur à gaz.*)



George Daniel Scott, Vancouver, British Columbia, Canada, 8th March, 1899; 6 years. (Filed 26th September, 1898.)

*Claim.*—1st. In a machine for generating acetylene gas, having a water chamber, 10, with a gasometer arranged therein, in combination with a generating chamber 11, the closable chamber 29 for inserting the carbide, a grate 32 having the convexo-concavo bottom and the annular rim for properly distributing the carbide, an annular chamber 33 having the corrugated and perforated bottom arranged over the annular recess in the grate beneath, a pipe 34 having a fluted apron for depositing the water in the chamber 33, and a flexible tube 39 communicating with the said chamber 10 for supplying the water to the said pipe, as specified. 2nd. In an acetylene gas generator, having a water chamber 10 and a gasometer arranged therein, in combination with a carbide chamber 11, having a convexo-concavo carbide grate 32 pivoted therein for exposing a large area of the carbide, a fluted water-tray 35 fixed to the discharge end of a pipe 34 which receives the water supply, said tray being arranged over a chamber having an annular corrugated and perforated bottom for supplying a large area of moisture to the carbide, and of a bracket 38 for elevating the nozzle of the pipe 39 and thereby automatically preventing such supply of water when the gas is being generated faster than the consumption, as specified. 3rd. In a machine for generating acetylene gas, in combination with a water chamber, a gasometer working therein, and a closable chamber B for generating the gas, a closed chamber 11 beneath the water chamber for washing gas, a pipe 40 leading from the carbide-chamber to the closed chamber 11, and an S-shaped pipe 18 come